

CLAIMS

We Claim:

- 1 1. A method of bridging communications between a UPnP type device and a  
2 rendezvous type device comprising:
  - 3 a. receiving a communication from the UPnP type device for the rendezvous type  
4 device;
  - 5 b. converting the communication into the rendezvous protocol thereby forming a  
6 converted communication; and
  - 7 c. transmitting the converted communication to the rendezvous device.
- 1 2. The method as claimed in claim 1 wherein the UPnP type device is coupled within  
2 a UPnP type network of devices.
- 1 3. The method as claimed in claim 1 wherein the rendezvous type device is coupled  
2 within a rendezvous type network of devices.
- 1 4. The method as claimed in claim 1 wherein converting the communication is  
2 performed by a conversion circuit.
- 1 5. The method as claimed in claim 4 wherein the conversion circuit is programmed  
2 by a selective one of the UPnP type device and the rendezvous type device.
- 1 6. A method of bridging communications between a rendezvous type device and a  
2 UPnP type device comprising:

- a. receiving a communication from the rendezvous type device for the UPnP type device;
- b. converting the communication into the UPnP protocol thereby forming a converted communication; and
- c. transmitting the converted communication to the UPnP type device.

7. The method as claimed in claim 6 wherein the UPnP type device is coupled within a UPnP type network of devices.

8. The method as claimed in claim 6 wherein the rendezvous type device is coupled within a rendezvous type network of devices.

9. The method as claimed in claim 6 wherein converting the communication is performed by a conversion circuit.

10. The method as claimed in claim 9 wherein the conversion circuit is programmed by a selective one of the UPnP type device and the rendezvous type device.

11. A converter configured to couple between a UPnP type device and a rendezvous type device to convert communications between the UPnP type device and the rendezvous type device into proper formats, comprising:

- a. a UPnP type interface circuit configured to couple to a UPnP type device operating under a UPnP protocol;
- b. a rendezvous type interface circuit configured to couple to a rendezvous type device operating under a rendezvous protocol; and
- c. a conversion circuit coupled between the UPnP type interface circuit and the rendezvous type interface circuit to convert communications directed from the

10                   UPnP type device to the rendezvous type device into the rendezvous protocol and  
11                   converting communications directed from the rendezvous type device to the UpnP  
12                   type device into the UPnP protocol.

1       12.           The converter as claimed in claim 11 wherein the UPnP type device is coupled  
2                   within a UPnP network of devices.

1       13.           The converter as claimed in claim 11 wherein the rendezvous type device is  
2                   coupled within a rendezvous network of devices.

1       14.           The converter as claimed in claim 11 wherein a conversion program used by the  
2                   conversion circuit is stored within the conversion circuit.

1       15.           The converter as claimed in claim 11 wherein the conversion circuit is  
2                   programmed by a selective one of the UPnP type device and the rendezvous type device.

1       16.           The converter as claimed in claim 11 wherein the converter is a stand-alone  
2                   device.

1       17.           The converter as claimed in claim 11 wherein the converter is implemented within  
2                   a selective one of the UPnP type device and the rendezvous type device.

1       18.           The converter as claimed in claim 11 wherein the UPnP type interface circuit  
2                   comprises a UPnP proxy which maintains a table of entries each corresponding to a rendezvous  
3                   type device.

1 19. The converter as claimed in claim 11 wherein the rendezvous type interface circuit  
2 comprises a rendezvous proxy which maintains a table of entries each corresponding to a UPnP  
3 type device.

1 20. A converter configured for coupling between a UPnP type device and a  
2 rendezvous type device to convert communications between the UPnP type device and the  
3 rendezvous type device into proper formats, comprising:

- 4 a. a first means for interfacing configured for coupling to a UPnP type device  
5 operating under a UPnP protocol;
- 6 b. a second means for interfacing configured for coupling to a rendezvous type  
7 device operating under a rendezvous protocol; and
- 8 c. means for converting coupled between the first means for interfacing and the  
9 second means for interfacing for converting communications directed from the  
10 UPnP type device to the rendezvous type device into the rendezvous protocol and  
11 converting communications directed from the rendezvous type device to the UPnP  
12 type device into the UPnP protocol.

1 21. The converter as claimed in claim 20 wherein the UPnP type device is coupled  
2 within a UPnP type network of devices.

1 22. The converter as claimed in claim 20 wherein the rendezvous type device is  
2 coupled within a rendezvous type network of devices.

1 23. The converter as claimed in claim 20 wherein a conversion program used by the  
2 means for converting is stored within the means for converting.

1 24. The converter as claimed in claim 20 wherein the means for converting is  
2 programmed by a selective one of the UPnP type device and the rendezvous type device.

1 25. The converter as claimed in claim 20 wherein the converter is a stand-alone  
2 device.

1 26. The converter as claimed in claim 20 wherein the converter is implemented within  
2 a selective one of the UPnP type device and the rendezvous type device.

1 27. The converter as claimed in claim 20 wherein the first means for interfacing  
2 comprises a UPnP proxy which maintains a table of entries each corresponding to a rendezvous  
3 type device.

1 28. The converter as claimed in claim 20 wherein the second means for interfacing  
2 comprises a rendezvous proxy which maintains a table of entries each corresponding to a UPnP  
3 type device.

1 29. A bridge device configured for coupling between a UPnP type device and a  
2 rendezvous type device for converting communications between the UPnP type device and the  
3 rendezvous type device into proper formats, comprising:

- 4 a. a UPnP type interface circuit configured for coupling to a UPnP type device  
5 operating under a UPnP protocol;
- 6 b. a rendezvous type interface circuit configured for coupling to a rendezvous type  
7 device operating under a rendezvous protocol; and
- 8 c. a conversion circuit coupled between the UPnP type interface circuit and the  
9 rendezvous type interface circuit for converting communications directed from the  
10 UPnP type device to the rendezvous type device into the rendezvous protocol and

1                   converting communications directed from the rendezvous type device to the UPnP  
2                   type device into the UPnP protocol.

1    30.            The bridge as claimed in claim 29 wherein the UPnP type device is coupled  
2                   within a UPnP network of devices.

1    31.            The bridge as claimed in claim 29 wherein the rendezvous type device is coupled  
2                   within a rendezvous network of devices.

1    32.            The bridge as claimed in claim 29 wherein a conversion program used by the  
2                   conversion circuit is stored within the conversion circuit.

1    33.            The bridge as claimed in claim 29 wherein the conversion circuit is programmed  
2                   by a selective one of the UPnP type device and the rendezvous type device.

1    34.            The bridge as claimed in claim 29 wherein the bridge is a stand-alone device.

1    35.            The bridge as claimed in claim 29 wherein the bridge is implemented within a  
2                   selective one of the UPnP type device and the rendezvous type device.

1    36.            The bridge as claimed in claim 29 wherein the UPnP type interface circuit  
2                   comprises a UPnP proxy which maintains a table of entries each corresponding to a rendezvous  
3                   type device.

1    37.            The bridge as claimed in claim 29 wherein the rendezvous type interface circuit  
2                   comprises a rendezvous proxy which maintains a table of entries each corresponding to a UPnP  
3                   type device.

1     38.         A network of devices operating under a plurality of protocols comprising:  
2             a.     one or more UPnP type devices operating under a UPnP protocol;  
3             b.     one or more rendezvous type devices operating under a rendezvous protocol; and  
4             c.     a converter coupled to the UPnP type devices and the rendezvous type devices for  
5                 converting communications between the UPnP type devices and the rendezvous  
6                 type devices into proper formats, comprising:  
7                 i.     a UPnP type interface circuit coupled to the UPnP type devices;  
8                 ii.    a rendezvous type interface circuit coupled to the rendezvous type  
9                     devices; and  
10                iii.   a conversion circuit coupled to UPnP type interface circuit and the  
11                    rendezvous type interface circuit for converting communications  
12                    directed from the UPnP type devices to the rendezvous type  
13                    devices into the rendezvous protocol and converting  
14                    communications directed from the rendezvous type devices to the  
15                    UPnP type devices into the UPnP protocol.

1     39.         The network of devices as claimed in claim 38 wherein a conversion program  
2     used by the conversion circuit is stored within the conversion circuit.

1     40.         The network of devices as claimed in claim 38 wherein the conversion circuit is  
2     programmed by a selective one of a UPnP type device and a rendezvous type device.

1     41.         The network of devices as claimed in claim 38 wherein the converter is a stand-  
2     alone device coupled between the UPnP type devices and the rendezvous type devices.

1     42.           The network of devices as claimed in claim 38 wherein the converter is  
2     implemented within a selective one of the UPnP type device and the rendezvous type device.

1     43.           The network of devices as claimed in claim 38 wherein the UPnP type interface  
2     circuit comprises a UPnP proxy which maintains a table of entries each corresponding to a  
3     rendezvous type device.

1     44.           The network of devices as claimed in claim 38 wherein the rendezvous type  
2     interface circuit comprises a rendezvous proxy which maintains a table of entries each  
3     corresponding to a UPnP type device.